

# Notice of Allowability

Application No.

10/766,991

Examiner

Cuong V. Luu

Applicant(s)

OKE, HARSH PRAMOD

Art Unit

2128

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/12/2007.
2. ☒ The allowed claim(s) is/are 1, 4-6, 9-11, 14-16, 19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
KAMINI SHAH

SUPERVISORY PATENT EXAMINER

### DETAILED ACTION

Claims 1, 4-6, 9-11, 14-16, and 19 are pending. Claims 2-3, 7-8, 12-13, and 17-18 have been canceled. Claims 1, 4-6, 9-11, 14-16, and 19 have been examined. Claims 1, 4-6, 9-11, 14-16, and 19 have been allowed.

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Robert Reeser, III, Registration No. 45,548, on 1/10/2008.

1. Claim 1 has been amended as following:

A modular method of modeling a power plant, the power plant comprising a plurality of major components including at least one of a gas turbine, a heat recovery steam generator, a steam turbine, and a condenser/cooling tower, said method comprising:

selecting a plurality of major component modules' models from a library of component module models for each major component of the power plant, each major component module representing a power plant major component of a unique configuration;

inputting initial model information into a database for the major component selected modules by inputting the initial model information into a spread sheet

associated with each selected major component module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

~~running the modular model by~~ running each selected major component module and enabling data exchange between the selected major component modules, wherein running each selected major component module comprises running the selected major component modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed; and

generating a result that indicates the performance of the major components of the power plant.

2. Claim 4 has been amended as following:

A method in accordance with Claim 3 1 wherein said running each selected major component module in succession comprises running each selected major component module in a predetermined order.

3. Claim 6 has been amended as following:

A modular method of modeling a power plant having a plurality of components, said method comprising:

selecting at least two component module models from a library of component modules, each component module representing a power plant component of a unique configuration;

inputting initial model information into a database for the selected component modules by inputting initial model information into a spread sheet associated with each

selected module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

~~running the modular model by~~ running each selected component module and exchanging data between the selected component modules, wherein running each selected component module comprises running the selected component modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed; and

generating a result that indicates the performance of the major components of the power plant.

4. Claim 9 has been amended as following:

A method in accordance with Claim 8~~6~~ wherein said running each selected component module in succession comprises running each selected component module in a predetermined order.

5. Claim 11 has been amended as following:

A modular method of modeling a power plant, the power plant comprising a plurality of major components including at least one of a gas turbine, a heat recovery steam generator, a steam turbine, and a condenser/cooling tower, said method comprising:

creating a power plant model by selecting a plurality of major component modules' models from a library of component module models for each major component of the power plant, each major component module representing a power plant major component of a unique configuration;

linking the selected major component modules together to enable data exchange between modules;

inputting initial model information into a database for the selected major component modules by inputting initial model information into a spread sheet associated with each selected major component module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

~~running the modular model by~~ running each selected major component module and exchanging data between the selected major component modules, wherein running each selected major component module comprises running the selected major component modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed; and

generating a result that indicates the performance of the major components of the power plant

6. Claim 14 has been amended as following:

A method in accordance with Claim 13<sub>1</sub> wherein said running each selected major component module in succession comprises running each selected major component module in a predetermined order.

7. Claim 16 has been amended as following:

A power plant modular modeling system comprising a database operationally coupled to a computer, said database comprising a Library of power plant major component module models, each major component module representing a power plant major component of a unique configuration, said computer configured to:

create a power plant model by selecting a plurality of major component modules models from the library of component module models for each major component of the power plant;

link the selected major component modules together to enable data exchange between modules;

receive initial model information from a user for the selected major component modules, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

store the initial model information in a spread sheet associated with each selected major component module; and

~~run the modular model by~~ running each selected major component module including exchanging data between the selected major component modules, wherein running each selected major component module comprises running the selected major component modules successively one module at a time and passing the results from one module to the next module in succession until interface conditions converge or until a predetermined maximum number of iterative passes are completed.

8. Claim 19 has been amended as following:

A system in accordance with Claim 18~~6~~ wherein said computer is further configured to run each selected major component module in a predetermined order.

***Allowable Subject Matter***

**Claims 1, 4-6, 9-11, 14-16, and 19 are allowed. The following is an examiner's statement of reasons for allowance:**

9. As per claim 1, the prior arts of record teach A modular method of modeling a power plant, the power plant comprising a plurality of major components including at least one of a gas turbine, a heat recovery steam generator, a steam turbine, and a condenser/cooling tower, said method comprising:

selecting a plurality of major component modules' models from a library of component module models for each major component of the power plant, each major component module representing a power plant major component of a unique configuration;

inputting initial model information into a database for the major component selected modules by inputting the initial model information into a spread sheet associated with each selected major component module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

running each selected major component module and enabling data exchange between the selected major component modules until interface conditions converge or until a predetermined maximum number of iterative passes are completed; and

generating a result that indicates the performance of the major components of the power plant

but does not teach running each selected major component module in combination with running each selected major component module comprises running the selected major component modules successively one module at a time and passing the results from one module to the next module in succession as recited by the claimed invention.

10. As per claim 6, the prior arts of record teach a modular method of modeling a power plant having a plurality of components, said method comprising:

selecting at least two component module models from a library of component modules, each component module representing a power plant component of a unique configuration;

inputting initial model information into a database for the selected modules by inputting initial model information into a spread sheet associated with each selected module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

running each selected module and exchanging data between the selected modules until interface conditions converge or until a predetermined maximum number of iterative passes are completed; and

generating a result that indicates the performance of the major components of the power plant;

but do not teach running each selected module in combination with running each selected module comprises running the selected modules successively one module



at a time and passing the results from one module to the next module in succession  
as recited by the claimed invention.

11. As per claim 11, the prior arts of record teach a modular method of modeling a power plant, the power plant comprising a plurality of major components including at least one of a gas turbine, a heat recovery steam generator, a steam turbine, and a condenser/cooling tower, said method comprising:

creating a power plant model by selecting a plurality of major component modules' models from a library of component module models for each major component of the power plant, each major component module representing a power plant major component of a unique configuration;

linking the selected major component modules together to enable data exchange between modules;

inputting initial model information into a database for the selected major component modules by inputting initial model information into a spread sheet associated with each selected major component module, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;

running each selected major component module and exchanging data between the selected major component modules until interface conditions converge or until a predetermined maximum number of iterative passes are completed; and

generating a result that indicates the performance of the major components of the power plant;

but does not teach running each selected major component module in combination with running each selected major component module comprises running

the selected major component modules successively one module at a time and passing the results from one module to the next module in succession as recited by the claimed invention.

12. As per claim 16 the prior arts of record teach a power plant modular modeling system comprising a database operationally coupled to a computer, said database comprising a Library of power plant major component module models, each major component module representing a power plant major component of a unique configuration, said computer configured to:
- create a power plant model by selecting a plurality of major component modules' models from the library of component module models for each major component of the power plant;
  - link the selected major component modules together to enable data exchange between modules;
  - receive initial model information from a user for the selected major component modules, the initial model information including at least one of operating parameters, design data, convergence criteria, and a maximum number of passes;
  - store the initial model information in a spread sheet associated with each selected major component module; and
  - running each selected major component module including exchanging data between the selected major component modules until interface conditions converge or until a predetermined maximum number of iterative passes are completed;
- but does not teach running each selected major component module in combination with running each selected major component module comprises running the selected major component modules successively one module at a time and

passing the results from one module to the next module in succession as recited by the claimed invention.

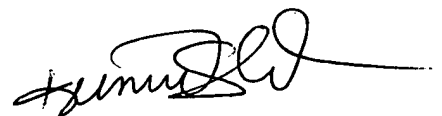
**Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."**

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cuong V. Luu whose telephone number is 571-272-8572. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah, can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. An inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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